

US EPA ARCHIVE DOCUMENT

DATA EVALUATION RECORD

1. CHEMICAL: Brodifacoum
2. FORMULATION: Assumed Technical
3. CITATION: WBA 8119: Acute oral toxicity to Beagle dogs and cats.  
by G.R. Parkinson, Jan. 1976. Acc. # 245704, submitted  
by ICI Americas, performed by English part of company.
4. REVIEWED BY: Russel Farringer  
Wildlife Biologist  
EEB/HED
5. DATE REVIEWED: 12/4/81
6. TEST TYPE: Acute Oral
  - A. Test Species: beagle dogs and cats
7. REPORTED RESULTS: LD<sub>50</sub> to Beagle dogs between 0.25 - 1 mg/kg  
LD<sub>50</sub> to cats approximately 25 mg/kg
8. REVIEWER'S CONCLUSIONS: The results of this study have been reported here.  
The study has been deferred to Toxicology Branch/HED for validation. The  
study would not be adequate for registration actions for one or more of the  
following reasons; (1) number of animals used; (2) supplemental feed analysis  
not given; (3) dose response findings were inadequate to determine a true  
LD<sub>50</sub>; (4) No controls were indicated. The reported results tend to indicate  
that the product is highly toxic to beagle dogs and domestic cats.

*entered as  
2.0.1. data  
in ecotox  
database*



10/26/81

## DATA EVALUATION RECORD

1. CHEMICAL: Brodifacoum
2. FORMULATION: (93.1% to 96% <sup>μ</sup>Pore)
3. CITATION: Brodifacoum: Absorption, excretion and tissue retention in the rat. by H. Bratt, & Pamela Hundson for ICI, LTD, Alderly Park, Macclesfield, Cheshire, UK CTL Study No. UR0110, Report No. -CTL/P/462, EPA Acc. # 245704.
4. REVIEWED BY: Russel Farringer  
Wildlife Biologist  
EEB/HED
5. DATE REVIEWED: 10/26/81
6. TEST TYPE: Brodifacoum: Absorption, excretion and tissue retention in the rat.
  - A. Test Species: Rat (?)

7. REPORTED RESULTS:

In the situation where predators consume rodents which have been poisoned by brodifacoum, there is a possibility that secondary poisoning may occur due to the presence of brodifacoum in the rodent carcass.

8. REVIEWER'S CONCLUSIONS: While the expertise need to fully evaluate the techniques and/or procedures of this study lie within another branch of HED, the following was exerted without validation.
  - 1) Absorption of brodifacoum may be a saturable process with fecal excretion increasing rapidly thereafter.
  - 2) Most (74.6%) of the dose was retained in the tissues of the animals 10 day after dosing, (0.25 mg/kg; 6.6 mc/kg) principally in the liver (22.8%) and pancreas (2.3%), but also in kidney (0.8%), heart (0.1%) and spleen (0.2%). The remainder of the dose (approximately 50%) was present in the carcass and skin. Analysis showed that 31.3% and 19.6% of the dose was present in the carcass and liver respectively was unchanged brodifacoum together with two other more polar components which were not identified. The biological half-life for the radioactive species in tissues was estimated to be 150-200 days.
  - 3) Brodifacoum has a moderate to high systemic toxicity to animals.